

10/578951

Practitioner's Docket No. 16139/09062

## CHAPTER II

Preliminary Classification:  
Proposed Class:  
Subclass:

**TRANSMITTAL LETTER  
TO THE UNITED STATES ELECTED OFFICE (EO/US)  
(ENTRY INTO U.S. NATIONAL PHASE UNDER CHAPTER II)**

PCT/US04/37813	12 November 2004 (12.11.04)	12 November 2003 (12.11.03)
International Application No.	International Filing Date	Priority Date Claimed

TREATMENT OR PREVENTION OF CARDIOVASCULAR AND RESPIRATORY DISORDERS  
WITH NOVEL SUBSTITUTED CYCLIC-AMP SPECIFIC PHOSPHODIESTERASE INHIBITORS

Title of Invention

Wang, Desuo; Kosh, Joseph W.; Sowell, Sr., J. Walter; and Wang, Ting

Applicant(s)

**Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**


- Applicant herewith submits to the United States Elected Office (EO/US) the following items under 35 U.S.C. § 371:

**EXPRESS MAILING UNDER 37 C.F.R. § 1.10\***

*(Express Mail label number is mandatory.)*

*(Express Mail certification is optional)*

I hereby certify that this paper, along with any document referred to, is being deposited with the United States Postal Service on this date in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 as "Express Mail Post Office to Addressee" Mailing Label No. EV 452150704 US.

  
Type or print name of person mailing paper

Mim Voet

Date: May 10, 2006.

*Signature of person certifying*

**WARNING:** Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

**\*WARNING:** Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

10/578951

- a. This express request to immediately begin national examination procedures (35 U.S.C. § 371(f)).
- b. The U.S. Basic National Fee (35 U.S.C. § 371(a)) and other fees (37 C.F.R. § 1.492) as indicated below:

## 2. Fees

<b>NATIONAL STAGE FEES*</b>	Basic filing fee \$ 300.00 Examination fee \$ 200.00 Search fee \$ 500.00				\$1,000.00
<b>CLAIMS FEE*</b>	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	
	<b>TOTAL CLAIMS</b>	45 - 20 =	25	x \$50.00 =	\$1,250.00
	<b>INDEPENDENT CLAIMS</b>	1 - 3 =	0	x \$200.00 =	\$ 0.00
	<b>MULTIPLE DEPENDENT CLAIM(S)</b> (if applicable)			+ \$	\$0.00
	Basic filing fees				\$2,250.00
<b>ADDITIONAL PAGES</b>	Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250.00 for each additional 50 sheets of paper or fraction thereof"				
	Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (rounded up to a whole number)		\$250.00
	113	13	1		
	--Total of above Calculations				= \$2,500.00
<b>SMALL ENTITY</b>	Applicant hereby claims small entity status. 37 C.F.R. 1.27. The above fees are reduced by ½				\$1,250.00
	Subtotal				\$1,250.00
	Total National Fee				\$1,250.00
	Fee for recording the enclosed assignment document \$ (37 C.F.R. § 1.21(h)). See Item 13 below). See attached "ASSIGNMENT COVER SHEET".				\$40.00
<b>TOTAL</b>	Total Fees enclosed				\$1,290.00

See attached **Preliminary Amendment Increasing the Number of Claims.**

Attached is a check in the amount of \$1,290.00.

Charge any additional fees required by this paper or credit any overpayment to Deposit Account No. 50-2548.

A duplicate copy of this sheet is enclosed.

10/578951

**Assertion of Small Entity Status**

AP20 Rec'd PCT/PTO 10 MAY 2006

Applicant hereby asserts status as a small entity under 37 C.F.R. § 1.27.

3. **Combined Declaration and Power of Attorney** document is transmitted herewith.
4. A copy of **the International application as filed** (35 U.S.C. § 371(c)(2)) is transmitted herewith.
5. A translation of the International application into the English language (35 U.S.C. § 371(c)(2)) is not required as the application was filed in English.
6. **Amendments to the claims** of the International application under PCT Article 19 (35 U.S.C. § 371(c)(3)) are transmitted herewith.
7. A translation of the amendments to the claims under PCT Article 19 (38 U.S.C. § 371(c)(3)) is not required as the amendments were made in the English language.
8. A copy of the **international preliminary examination report (PCT/IPEA/409)** is transmitted herewith
9. Annex(es) to the international preliminary examination report is/are transmitted herewith.
10. A translation of the annexes to the international preliminary examination report is not required as the annexes are in the English language.
11. An oath or declaration of the inventor (35 U.S.C. § 371(c)(4)) complying with 35 U.S.C. § 115 will follow.
- II. Other document(s) or information included:
  12. An International Search Report (**PCT/ISA/210**) or Declaration under PCT Article 17(2)(a) and Written Opinion of International Searching Authority (**PCT/ISA/237**) are transmitted herewith.
  13. An **Information Disclosure Statement** under 37 C.F.R. §§ 1.97 and 1.98 is transmitted herewith.

Also transmitted herewith is/are **Form PTO-1449 (PTO/SB/08A and 08B) and a copy of citation(s) listed.**
  14. An **Assignment** document is transmitted herewith for recording.
  15. Additional documents:
    - a. **International Publication No. WO 05/046676**
      1. Specification, claims and drawing
    - b. **Preliminary amendment** (37 C.F.R. § 1.121)
    - c.
      1. **PCT/IB/301**
      2. **PCT/IB/304**
      3. **PCT/IPEA/416**
      4. **PCT/ISA/220**
      5. **PCT/IB/308** (First Notice and Second and Supplementary Notice)

16. The above items are being transmitted before 30 months from any claimed priority date.

Date: May 10, 2006

Reg. No.: 35,124

Tel. No.: 864-250-2238  
Fax No.: 803-255-9831  
Customer No.: 27530



Signature of Practitioner  
Charles E. Dunlap, Ph.D., Esq.

NELSON MULLINS RILEY & SCARBOROUGH, LLP  
1320 Main Street, 17th Floor  
Columbia, SC 29201  
USA

Practitioner's Docket No. 16139/09062

10/578951  
IAP20Rec'd FCT/PTO 10 MAY 2006  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Desuo Wang, Joseph W. Kosh, J. Walter Sowell, Sr. and Ting Wang

Application No.: Not yet assigned.

Group No.: Not yet assigned.

Filed: Herewith.

Examiner: Not yet assigned.

Confirmation No.: Not yet assigned.

For: TREATMENT OR PREVENTION OF CARDIOVASCULAR AND RESPIRATORY  
DISORDERS WITH NOVEL SUBSTITUTED CYCLIC-AMP SPECIFIC  
PHOSPHODIESTERASE INHIBITORS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

EXPRESS MAIL CERTIFICATE

"Express Mail" label number EV 452150704 US

Date of Deposit May 10, 2006

I hereby state that the following *attached* paper, comprising of:

1. Fee Transmittal for FY 2006 (2 pages – original and copy)
2. Combined Declaration and Power of Attorney (3 pages)
3. Transmittal Letter to the United States Elected Office (EO/US) (Entry into U.S. National Phase Under Chapter II)(4 pages – original and copy)
4. PCT Application No. PCT/US04/37813 (specification, claims, abstract - 102 pages) and Drawings (11 sheets)
5. Amendments to claims of International PCT application: Amendment Under Article 34 PCT with replacement pages mailed 9/6/05 (28 pages); and Letter to amend claims with replacement pages (4 pages) and Transmittal Letter (1 page) mailed 4/27/05
6. International Preliminary Examination Report (PCT/IPEA/409) (4 pages)
7. International Search Report (PCT/ISA/210) (3 pages)
8. Written Opinion of International Searching Authority (PCT/ISA/237)(4 pages) with one ref.
9. Information Disclosure Statement Transmittal (1 page)
10. Information Disclosure Statement (IDS) List (1 page)
11. Enclosed cited reference (1)
12. Recordation Cover Sheet Assignment(4 pages)
13. True copy of Assignment document (5 pages)
14. Copy of PCT Publication No. WO 2005/046676 A1 (116 pages)
15. Preliminary Amendment (16 pages)
16. Form PCT/IB/301 (3 pages)
17. Form PCT/IB/304 (1 page)

10/578951

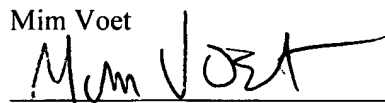
1AP20REGPGNPTO 10 MAY 2006

18. Form/IPEA/416 (1 page)
19. Form PCT/ISA/220 (2 pages)
20. Form PCT/IB/308 (first notice 1 page and second notice 1 page)
21. Patent Application Data Sheet (5 pages)
22. Check in the amount of \$1,290.00
23. Return Receipt Postcard,

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed to

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450.

Mim Voet



Signature of person mailing paper or fee

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2006

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) \$1,290.00

### Complete if Known

Application Number	Not yet assigned.
Filing Date	May 10, 2006 16139/09062
First Named Inventor	Desuo Wang, et al.
Examiner Name	Not yet assigned.
Art Unit	Not yet assigned.
Attorney Docket No.	16139/09062

### METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: 50-2548 Deposit Account Name: Nelson Mullins Riley & Sc

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

### FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

#### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	\$500.00
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

#### 2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims Extra Claims Fee (\$)

45 - 20 or HP = 25 x \$25 = 625.00

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims Extra Claims Fee (\$)

1 - 3 or HP = 0 x \$100 = .00

HP = highest number of independent claims paid for, if greater than 3.

#### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$)

113 - 100 = 13 / 50 = 1 (round up to a whole number) x \$125 = \$125

#### 4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Assignment recordation \$40.00

#### SUBMITTED BY

Signature	Registration No. (Attorney/Agent) 35,124	Telephone 864-250-2238
Name (Print/Type) Charles E. Dunlap, Ph.D., Esq.		Date May 10, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.